

# Fisk & Crawford Former Power Plants







## Background

Activity	Date			
PERRO/LVEJO meeting	August 30			
CLC letter outlining concerns	September 18			
Concept proposed	October 10			
Draft work plan	November 21			
Community Fact Sheet	November 29			
Monitoring conducted	December 3-6			
Present results	February			



## Key Questions

- Are elevated levels of dust blowing into the surrounding community from the sites?
- Do people in communities surrounding the plants have higher levels of radiation exposure compared to communities not near the plants?



### Work Plan Objectives

- Collect perimeter particulate readings (normal conditions)
- Collect perimeter particulate readings (abnormal conditions)
- Collect meteorological data (temp, wind speed/direction, pressure)
- Collect real-time gamma radiation screening readings with GPS
  - Surrounding neighborhoods & compare



### **Participants**

U.S. EPA (Superfund, Brownfields, ARD, LCD)

Weston Solutions, Inc.

Illinois EPA

ATSDR/CDC

Illinois Department of Public Health

City of Chicago Bureau of Environmental Health & Safety Management

**PERRO** 

LVEJO

Midwest Generation, LLC



## Crawford Property Boundary





### **Around Crawford**







## Around Crawford



Data Ram #3 - December 5th at 10:23am



### Inside Crawford



Coal Pile Storage Area



## Fisk Property Boundary





### **Around Fisk**







## Around Fisk







## Stationary Particulate Data











### Particulates

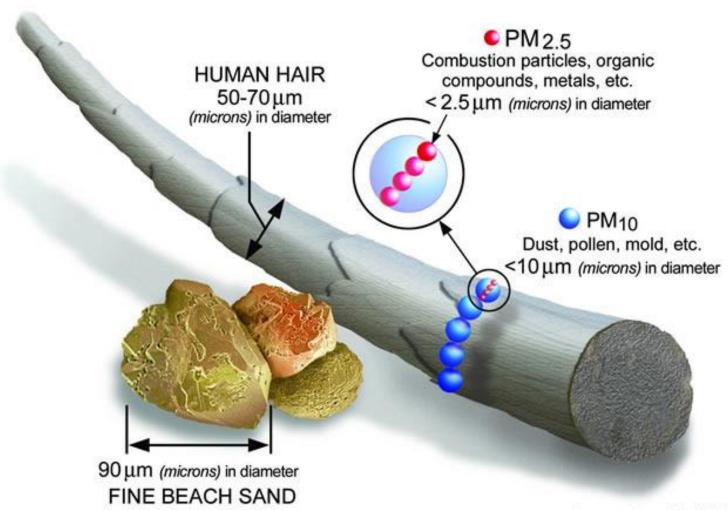


Image courtesy of the U.S. EPA



## Stationary Data - Crawford

		Weather Information <sup>1</sup>								
				Relative	Originating		Partic ulate TWA (µg/m³)  Location			
		Temperature	Barometer	Humidity	Wind	Wind Speed				
Date	Time	(°F)	(inches)	(%)	Direction	(mp h)	Dataram 1	Dataram 2	Dataram 3	Dataram 4
December 3, 2012 <sup>2</sup>	10:00 am.	628	29.61	73	S	13	77.2	84.1	96.3	96.2
	11:00 am.	642	29.88	73	S	11	69.5	77.5	89.5	88.7
<u>DAY 1</u>	12:00 p.m.	67.1	29.84	69	S	12	61.4	69.8	80.6	79.5
Mist – AM	1:00 p.m.	71.1	29.81	61	S	17	52.7	60.4	71.9	68.8
Wind – PM	2:00 p.m.	71.1	29.78	60	S	21	45.5	52.4	62.8	59.4
	3:00 p.m.	71.1	29.77	58	S	20	39.8	46.2	55.7	52.0
Warm	4:00 p.m.	70.0	29.81	61	SSW	17	35.4	41.4	50.4	46.2
	5:00 p.m.	68.0	29.80	63	SSW	15	32.2	37.9	46.7	41.9
	6:00 p.m.	669	29.81	62	SSW	23	31.4	37.7		41.8
Average		68.0	29.79	64	SSW	17	49.5	56.4	69.2	63.8
December 5, 2012 <sup>3</sup>	9:00 a.m.	36.4	29.70	39	NE	3	4.4	15.4	8.4	7.7
	10:00 am.	37.8	29.74	45	NNE	3	4.2	11.6	9.1	5.7
DAY 3	11:00 am.	38.1	29.75	47	NNE	5	4.3	12.6	8.5	4.7
Clear	12:00 p.m.	43.7	29.74	47	ENE	3	4.9	11.7	8.1	4.5
Calm	1:00 p.m.	452	29.74	45	ESE	2	5.3	10.2	7.3	4.4
ll l	2:00 p.m.	429	29.71	45	ENE	3	6.1	9.3	6.9	4.3
Cold	3:00 p.m.	39.6	29.67	46	ENE	2	6.5	8.4	7.2	4.0
	4:00 p.m.	37.0	29.66	49	ENE	2	7.2	7.9	4.0	3.8
<u> </u>	5:00 p.m.	40.5	29.62	54	NE	0	7.2	7.6	4.5	4.0
Average		40.1	29.70	46	ENE	3	5.6	10.5	7.1	4.8

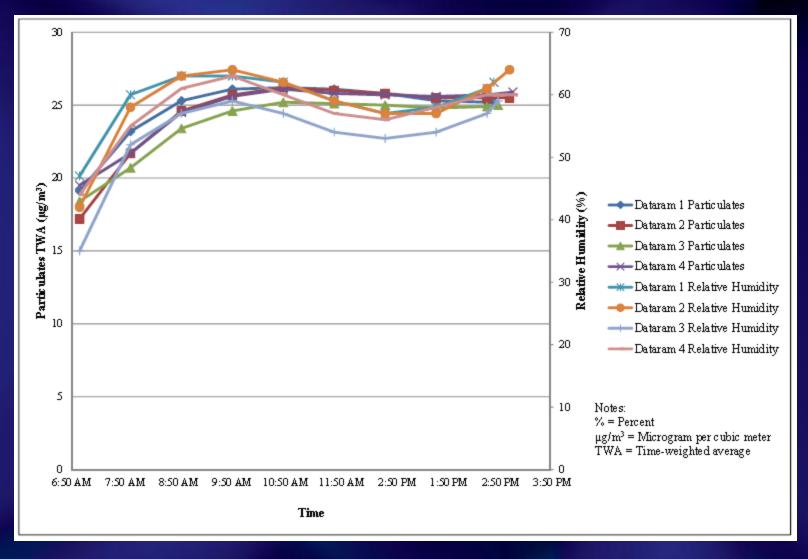


## Stationary Data - Fisk

		Weather Information 1								
				Relative	Originating		Particulate TWA (µg/m³)			
		Temperature	Barometer	Humidity	Wind	Wind Speed	Location			
Date	Time	(°F)	(inches)	(%)	Direction	(mph)	Dataram l	Dataram 2	Dataram 3	Dataram 4
December 4, 2012 <sup>2</sup>	9:00 a.m.	52.3	30.00	40	ssw	8	4.0	5.8	7.5	8.2
	10:00 a.m.	57.9	30.14	36	wsw	4	3.9	5.6	6.5	8.2
DAY 2	11:00 a.m.	55.7	29.58	35	wsw	4	3.7	5.3	5.9	7.8
	12:00 p.m.	54.6	30.00	35	ESE	9	3.3	4.9	5.3	7.3
Sun	1:00 p.m.	57.6	29.70	33	sw	6	3.0	4.8	5.0	7.0
Wind	2:00 p.m.	58.4	30.69	33	ssw	6	2.9	4.9	5.0	6.8
Warm	3:00 p.m.	57.8	29.77	34	wsw	7	2.8	4.8	4.8	6.8
Wind shift	4:00 p.m.	55.9	29.80	38	SE	4	2.8	4.8	4.8	6.7
VVIII OI III C	5:00 p.m.	55.1	29.96	41	ESE	6	2.9	4.8	4.9	6.8
Average		56.1	29.96	36	WSW	6	3.3	5.1	5.5	7.3
December 6, 2012 <sup>3</sup>	7:00 a.m.	35.5	29.44	42	SSE	3	19.1	17.2	18.4	19.5
	8:00 a.m.	35.5	29.44	56	SSE	2	23.2	21.7	20.7	21.7
DAVA	9:00 a.m.	37.3	29.43	61	ssw	3	25.3	24.6	23.4	24.5
<u>DAY 4</u>	10:00 a.m.	39.9	29.43	62	ssw	2	26.1	25.7	24.6	25.6
Calm	11:00 a.m.	42.8	29.37	60	SSW	3	26.2	26.2	25.2	26.1
Cold	12:00 р.т.	45.0	29.36	57	was	3	26.1	26.0	25.1	25.8
	1:00 p.m.	45.6	29.31	56	was	3	25.8	25.8	25.0	25.7
	2:00 p.m.	45.7	29.26	57	SSW	3	25.3	25.5	24.8	25.6
	3:00 p.m.	45.6	29.26	60	SSE	3	25.2	25.5	24.9	25.7
	4:00 p.m.	44.9	29.26	61	SSE	3	25.2	25.5	25.0	25.9
Average		41.8	29.36	57	ssw	3	24.8	24.4	23.7	24.6

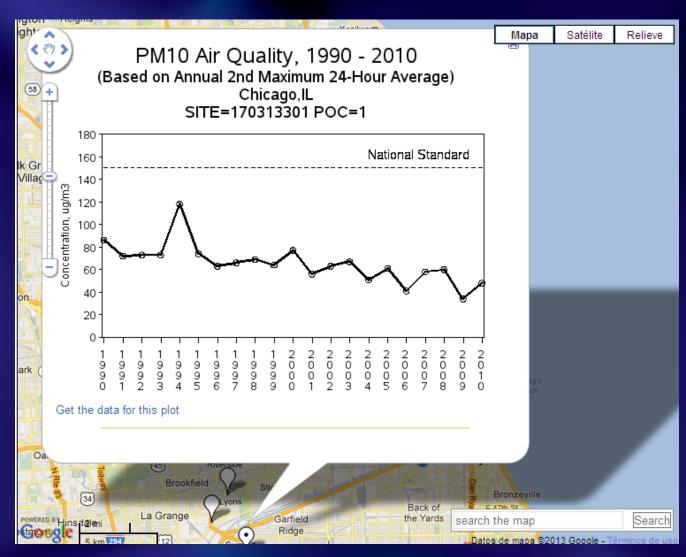


### Particulate & Relative Humidity





### Regional Particulate Data



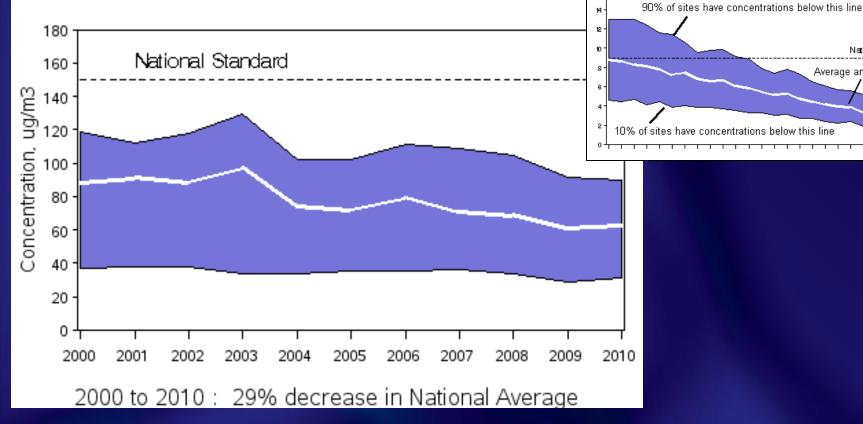


### National Particulate Data

Average among all sites

### PM10 Air Quality, 2000 - 2010

(Based on Annual 2nd Maximum 24-Hour Average)
National Trend based on 601 Sites





## Mobile Data

3 runs/day







### Mobile Perimeter Runs





All data points at https://r5imt.net/pilsen/



### Data

- Radiation screening
  - Background





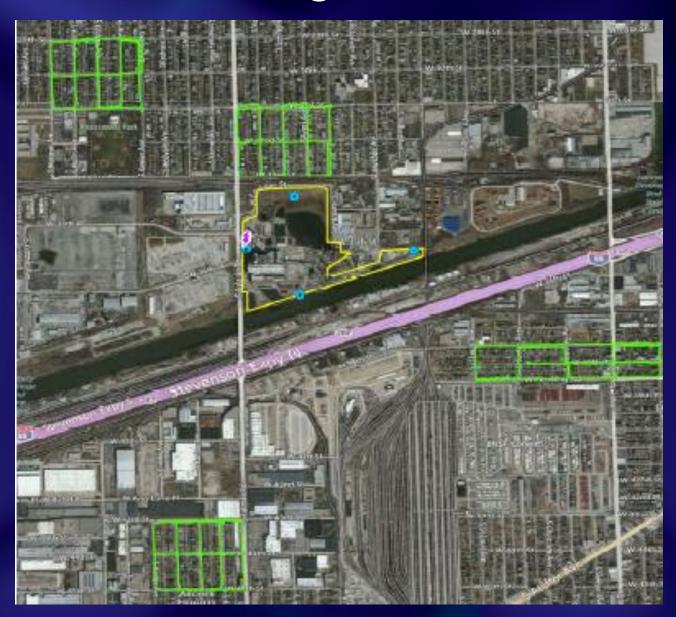


## Rad Screening Around Fisk





## Rad Screening Around Crawford





## Rad Screening Reference Areas

All data points at https://r5imt.net/pilsen/





### Results

### **DUST**

- Particulate (PM-10) monitoring in both stable & unstable conditions did not reveal levels of concern for dust from either site.
- Particulate (PM-10) levels are consistent with background dust levels found in urban areas.

### RADIATION

- Gamma radiation levels surrounding both sites are similar to reference neighborhoods.
- Gamma radiation levels are consistent with background levels found in urban areas.



### Outreach - Fact Sheets



For more information
For questions, comments orm are
information about tests near the Fish
and Crawford sites, contact

#### Paul Ruesch

On-Scene Coordinator 312-886-7898 ruesch paul@epa.gov

#### Herib erto León

Community Involvement Coordinator 312-886-6163 leon.heriberto@epa.gov

Superfund Division 77 W Jackson Blvd. Chicago, IL 60604

Youmay call the EPA toll-free at 800-621-8431, weekdays, 830 a.m. - 4:30 p.m.

orvisir www.epa.gov/regioni/cleanup/pilse nlittlevilla.ge

### To keep the community better informed, EPA is working with:

Pilsen Environm ental Rights and Reform Organization 312-854-9247 www.pilsenperro.org

Little Village Elwironmental Justice Organization 773-762-6991 info@bejo.org

### Air Testing Set Near Pilsen, Little Village Coal Plants

Fisk Station and Crawford Station Sites
Chicago, Illinois November / December 2012



The Flok Station as seen from a stress in the Filsen neighborhood.

The U.S. Environmental Protection Agency will be conducting air monitoring and radiation sereening around Midwest Generation's Fish Station and Crawford Station sites in December.

The EPA will monitor the air around the facilities and check for radiation in residential areas near the sites. This will help the EPA address concerns about human health and the environment in southwest. Chirago's Pilsen and Little Village communities.

EPA will attempt to monitor the air on both windy days and calm days. This is expected to show how weather and site activity may affect dust levels. The air monitoring will only measure how much dust is around the perimeter of the sites. It will not show what is in the dust. If EPA finds a significant amount of dust is leaving the site, the Agency may do more tests to find out what is in the dust.

The radiation screening in residential areas near the two stations is in response to community corn errs that radiation levels may be higher than what would normally be expected. The Piken and Little Village screenings will be compared to background readings of radiation from other Chirago residential areas. Unlike the airm unitoring, the radiation screening will be done only one.



Para más información Sitiere pregntas, comentarios o deseamás información sobre el aire cerca de Fisk y Crawford, pórgase en contacto con:

#### Paul Ruesch

Coordinador de Acciones en Terreno 312-886-7898 ruesch paul@epa.gov

#### Herib erto León

Coordinador de Participación Comunitaria 312-886-6163 leon.her.iberto@epa.gov

Superfund Division 77 W Jackson Blvd. Chicago, IL 60604

Puede llamar al rúmero gratuito de la EPA, 800-621-8431, biries a viernes, 8:30 am. – 4:30 p.m.

O visite: www.epa.gov/region5/clearup/pilse nlittlevilla.ce

Para mantener ala comunidad mejor informada, la EPA colabora con:

Organización sobre Derechos y Reformas Ambientales en Pilsen 312-854-9247 www.pilsenpero.org

Little Village Environmental Justice Organization 773-762-6991 info@bejo.org

### Se examina el aire cerca de plantas de carbón en Pilsen y La Villita

Las estaciones de Fisk y Crawford
Chicago, Illinois Noviembre / Diciembre 2012



La coasidin de Rok, visas desde una calle en el barrio de Risen.

La Agencia de Protección Ambiertal de EE.UU. (EPA por sus siglas en inglés) llevará a cabo monitoreo de laire y detección de radiación a rededor de las estaciones Fisk y Crawford de Midwest Generation en diciembre. La EPA resalizará e Imonitoreo de la irea alre dedor de las instalaciones e investigará si hay radiación en las zonas residenciales cercanas a ellas. Con estas medidas la EPA procura abordar preocupaciones sobre la salud humana y el medio ambiente en las comunidades de Pilsen y La Villita en el suroeste de Chicago.

La EPA intentará monitore ar el aire en días con viento y sin viento para ver cómo el tiempo y las actividades en las instalaciones podrían estar afectando los niveles de polvo. El monitoreo de laire sólo me dirá la cantidad de polvo por el per inietro de los sitios yno lo que contiene el polvo. Si la EPA encuentra que sale una cantidad considerable de polvo de los sitios, la agencia podría hacer más pruebas para averiguar lo que tiene el polvo. La detección de radiación en áreas residenciales cerca de las dos estaciones responde a la preocupación de la comunidad de que los niveles de radiación podrían ser más altos de lo normal. Los arálisis en Piken y La Villita se compararán con los de otras áreas residencia les de Chicago. A diferencia de Imonitoreo de l aire, la detección de radiación se hará de una sola vez.



### Region 5

Serving Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin and 35 Tribes

Contact Us Search: ○ All EPA ⊙ This Area

You are here: EPA Home » About Region 5 » Little Village & Pilsen Neighborhoods

### Environmental Issues in Chicago's Little Village & Pilsen Neighborhoods

Go

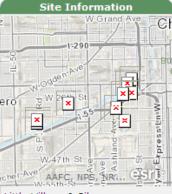
EPA is coordinating with representatives from the City of Chicago Department of Public Health, Illinois Environmental Protection Agency, Illinois Department of Public Health, and the Agency for Toxic Substances and Disease Registry on a number of projects in Chicago's Pilsen and Little Village Neighborhoods. Here you can find consolidiated information about the different environmental activities in the community.

- Air Issues
- Cleanup Sites
  - Celotex Superfund Site
  - Loewenthal Metals Corp. (former smelter)
  - Midwest Generation Crawford Generating Station
  - Midwest Generation Fisk Generating Station
  - Peoples Gas 22nd Street Station (former manufactured gas plant)
  - Peoples Gas Crawford Station (former manufactured gas plant)
- Environmental Justice
  - View of Pilsen neighborhood from EJ Mapper
  - View of Little Village neighborhood from EJ Mapper
  - Search the EJ View Mapper

### **Updates**

### December 2012

EPA staff is currently evaluating the data from the air monitoring along the perimeter of both Midwest Generation - Crawford Station and Fisk Station sites and the radiation screening in the surrounding neighborhood streets. This evaluation is expected to last through early next month.



Share

Little Village & Pilsen Neighborhoods Chicago, IL (Cook County)

#### **Contact Information**

#### Community Involvement Coordinator

Heriberto León (leon.heriberto@epa.gov) 312-886-6163 or 800-621-8431, ext. 66163

#### Links EXIT Disclaimer

- Agency for Toxic Substances
   & Disease Registry
- City of Chicago Boundaries



Air Quality

Air Toxics

Asbestos

**Permits** 

Tribes

Vehicles

Enforcement Global Air Indoor Air

### Region 5 Air and Radiation

Share

Serving Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin and 35 Tribes

ntact Us Search: O All EPA 💿 This Area

You are here: EPA Home » Region 5 » Air » Enforcement » Air Issues in Chicago's Pilsen Neighborhood

### Air Issues in Chicago's Pilsen Neighborhood

The EPA continues to be concerned about air pollution in the Pilsen neighborhood. EPA is evaluating air quality data gathered by two monitors in the community maintained by Illinois EPA and Cook County Department of Environmental Control.

Go

You will need Adobe Reader to view some of the files on this page. See EPA's PDF page to learn more.

### Air Quality System (AQS) Ambient Monitoring Data

- Lead Monitoring in the Pilsen Neighborhood April 2011 EXIT Disclaimer
- Monitoreo del plomo en el vecindario de Pilsen April 2011 EXIT DISCIAIMEN
- Ambient monitoring data from Air monitor #1 and #2 for Pilsen area January 2010 -September 2011 (PDF) (4pp, 62K)
- Ambient monitoring data monthly averages for Pilsen area January 2010 September 2011 (PDF) (1pp, 54K)

#### More information about air emissions

· AirData: Access to Air Pollution Data

### Nonattainment Designation for the 2008 Lead National Ambient Air Quality Standard

- Federal Register: Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (PDF) (24pp, 229K) Nov. 22, 2011
- Illinois Area Designations for the 2008 Lead National Ambient Air Quality Standards (PDF) (16pp, 1.6MB) Nov. 8, 2011
- Response to Comments on the State and Tribal Designation Recommendations for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS) (PDF) (14pp, 525K) October 2011
- Fact Sheet Final Revisions to the National Ambient Air Quality Standards for Lead (PDF) (6pp, 94K)
- October 2008 Final National Ambient Air Quality Standards for Lead General Overview (PDF) (21pp, 778K)

Air Monitor #1 W. 19th Pl

The Street map showing the locations of H. Kramer, Fisk Generating Station and the nearby ambient air monitoring stations. (Click to enlarge)

Enforcement History



### Outreach Ideas

- Final Fact Sheet (same distribution)
- Final report (POLREP)
- Updated websites
- Community Availability Session
  - Loewenthal Metals
  - Pilsen Area Soils Assessment
  - Former Manufactured Gas Plants
  - Fisk/Crawford Air Monitoring



### Questions

Paul Ruesch

On Scene Coordinator

U.S. EPA Region 5

Phone: 312-886-7898

Cell: 312-919-4382

Email: ruesch.paul@epa.gov